

1                   **DISK DRIVE CONTROL SYSTEM HAVING**  
2                   **CACHE DEMAND CIRCUIT**

3  
4                   **ABSTRACT**

5  
6           A disk drive control system comprising a micro-controller, a micro-controller cache  
7 system adapted to store micro-controller data for access by the micro-controller, a buffer  
8 manager adapted to provide the micro-controller cache system with micro-controller  
9 requested data stored in a remote memory, and a cache demand circuit adapted to: a)  
10 receive a memory address and a memory access signal, and b) cause the micro-controller  
11 cache system to fetch data from the remote memory via the buffer manager based on the  
12 received memory address and memory access signal prior to a micro-controller request.